



Supply of disc springs as spare parts

As a general rule, ENEMAC safety couplings (torque limiters) must be returned to the manufacturer for repair or modification. A functional warranty can only be provided for couplings that have been modified or repaired by ENEMAC GmbH. Disc springs may only be supplied as spare parts if returning the relevant coupling is not possible and the customer expressly declines the supply of a replacement coupling.

In this case, however, ENEMAC GmbH's warranty obligation shall cease to apply.

ENEMAC GmbH cannot provide a functional warranty for safety couplings modified by the customer, because:

- the safety couplings perform a safety function and must reliably ensure this function.
- the safety function of the coupling depends on the correct handling and adjustment of the special disc spring.
- within the adjustment range, the characteristic curve of the ENEMAC special disc spring runs exactly opposite to that of a conventional disc spring and therefore reacts in the opposite direction.

By ordering and taking delivery of disc springs, the customer waives all warranty claims.

Illustrated explanations of the assembly instructions



Marking of a safety coupling upon delivery
(left: clamping ring; right: adjustment nut)

Assembly instructions

When replacing the disc springs, please observe the following points in detail:

1. Remove the adjustment nut (clamping ring) and take out the disc spring.
2. Remove the MIN and MAX markings from the adjustment nut (clamping ring).
3. Insert the supplied disc spring in the correct orientation: the smaller diameter must face the adjustment nut (clamping ring) with the convex side, while the larger diameter must face the balls with the concave side (see operating instructions "Adjusting the release torque TA").
4. Reinstall the adjustment nut (clamping ring) and tighten it until the disc spring is flat or even slightly pressed inward (concave). The coupling's release torque is now within the correct adjustment range.
5. Turn the adjustment nut (clamping ring) counterclockwise and measure the release torque to adjust the coupling to the MAX release torque. Then, using the reference mark on the hub, apply a new "MAX" marking to the adjustment nut (see operating instructions "Adjusting the release torque TA").

6. The actual release torque T_A can only be measured correctly if:

6.1. For types ECA and ECB, the safety coupling is assembled with the belt pulley or adapter flange, or if the installation condition is simulated using a measuring device.

6.2. For all other types, the assembly instructions (see operating instructions) are followed.

7. The adjustment values for the release torque are specified in the respective data sheet.

8. Turn the adjustment nut (clamping ring) clockwise and measure the release torque to adjust the coupling to the MIN release torque. Then, using the reference mark on the hub, apply a new "MIN" marking to the adjustment nut (clamping ring).

9. Turn the adjustment nut (clamping ring) counterclockwise and measure the release torque to adjust the coupling to the desired release torque (between MIN and MAX).

10. Tighten the locking screws on the adjustment nut (clamping ring) securely.

